



ILLINOIS DRAFTING EDUCATORS ASSOCIATION

INTRODUCTORY DRAFTING TEST COMPUTER-AIDED DRAFTING

IDEA REGIONAL 2008

DO NOT OPEN BOOKLET UNTIL INSTRUCTED TO DO SO

GETTING STARTED:

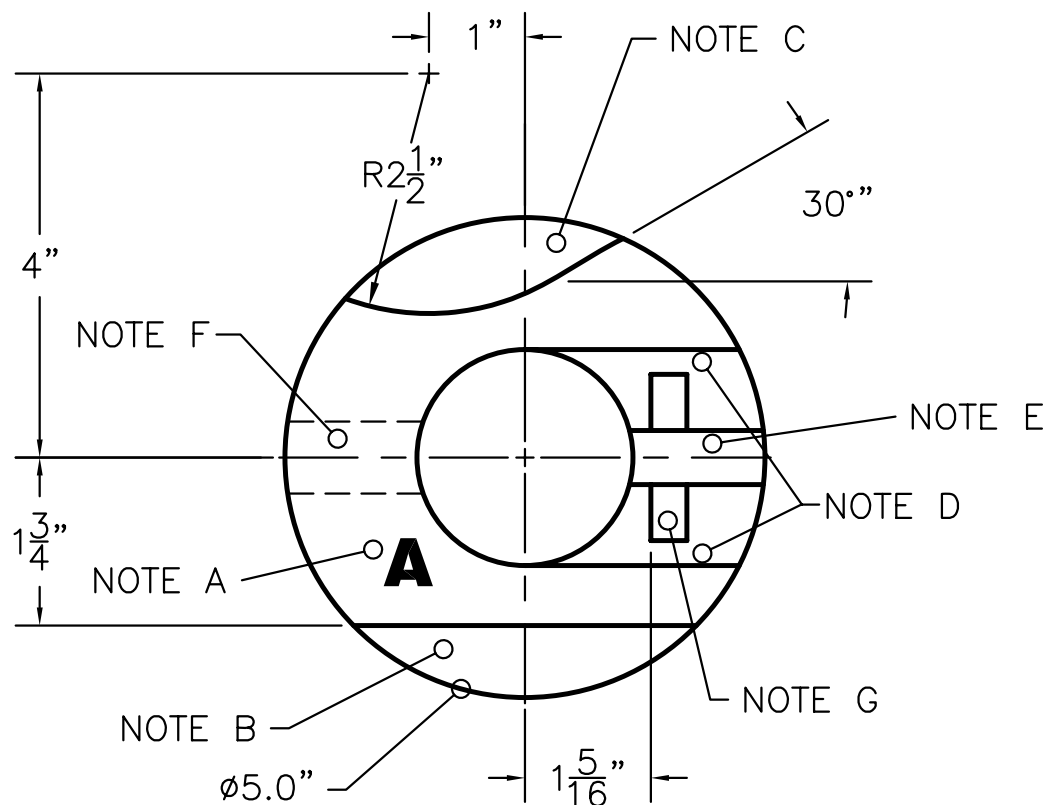
INSTRUCTIONS:

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY.....

1. PLACE YOUR CONTESTANT NUMBER IN THE TITLE BLOCK OF THE ANSWER SHEET. DO NOT PLACE YOUR NAME OR SCHOOL NAME ON THAT SHEET.
2. ON THE FOLLOWING PAGE YOU ARE GIVEN CONSTRUCTION LINES FOR THE FRONT VIEW OF A "CENTERING GUIDE," AND A NARRATIVE DESCRIPTION OF THE PART.
3. CONSTRUCT A FULL-SCALE [REAL SIZE] MULTIVIEW DRAWING, COMPLETE WITH FRONT, TOP, & RIGHT SIDE VIEW. IMPORTANT! YOU MAY NOT HAVE TO CONSTRUCT THE ENTIRE MULTIVIEW, BUT ONLY THE NECESSARY GEOMETRY TO CHECK THE REQUIRED DISTANCES. SEE #6 BELOW.
4. BEFORE ANSWERING THE QUESTIONS, YOU SHOULD SET THE CAD SYSTEM TO FOUR DECIMAL PLACES WHEN CHECKING DISTANCES. NOTE: THE JUDGE'S ANSWER KEY USES A CAD SOLUTION THAT DID NOT ROUND OFF FRACTIONS, BUT RATHER USED FRACTIONAL INPUT. IF YOU USE DECIMAL INPUT, IT IS RECOMMENDED THAT YOU DO NOT ROUND OFF DECIMALS.
5. USING THE CHECKING ASSIGNMENT SHEET, VISUALIZE WHERE THE LABELED POINTS ARE IN EACH VIEW AND CHECK 2D DISTANCES WITHIN EACH VIEW. ENSURE THAT YOU ARE CHECKING IN THE CORRECT VIEW.
6. YOUR REGIONAL CONTEST DIRECTOR OR CONTEST PROCTOR WILL GIVE YOU INSTRUCTIONS ABOUT WHETHER OR NOT THE DRAWING WILL BE PLOTTED OR SAVED. EACH SITE MAY BE DIFFERENT, SO LISTEN UP, AND GOOD LUCK!

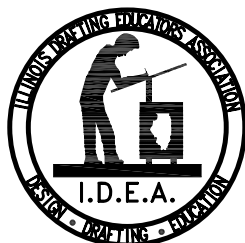
CENTERING GUIDE DESCRIPTION:

BELOW FIND A REDUCED SCALE FRONT VIEW OF THE OBJECT. BELOW THE FRONT VIEW FIND NOTES ABOUT THE SIZES REPRESENTED. READ THE DESCRIPTION CAREFULLY, AND THEN CONSTRUCT A FULL SIZE FRONT, TOP, AND RIGHT SIDE VIEW AS DIRECTED.



NOTES:

- A. THIS SURFACE A IS "FRONT-MOST", AND THE OVERALL DEPTH MEASUREMENT OF THE $\phi 5"$ GUIDE IS 2.5".
- B. THIS NORMAL SURFACE IS SET BACK FROM "SURFACE A" $3/4"$.
- C. THIS NORMAL SURFACE IS SET BACK FROM "SURFACE A" $1-3/4"$. THE 30° SURFACE IS TANGENT TO THE CURVED SURFACE.
- D. THIS SLOT [SAME WIDTH AS $\phi 1-1/8"$ HOLE] OUT THIS RIGHT SIDE IS $1-1/8"$ DEEP (i.e. THESE SURFACES ARE SET BACK $1-1/8"$).
- E. THIS GROOVE IS $9/16"$ WIDE BY $9/16"$ DEEPER, CENTERED WITH THE HOLE AND SLOT.
- F. THERE IS A $\phi 3/4$ HOLE THROUGH THIS WALL. THE CENTER AXIS IS SET BACK $5/8"$ FROM SURFACE A, AND PARALLEL WITH "SURFACE A".
- G. THIS KEY-SEAT IS CREATED FOR A $\phi 2"$ CIRCULAR DISC, $3/8"$ THICK, THAT HAS A CENTER AXIS CO-AXIAL WITH HOLE F. (THE CIRCULAR SHAPE APPEARS IN THE RIGHT SIDE VIEW AS A $1"$ RADIUS ARC, SAME CENTER AS HOLE F).



INTRODUCTORY REFERENCE SHEET

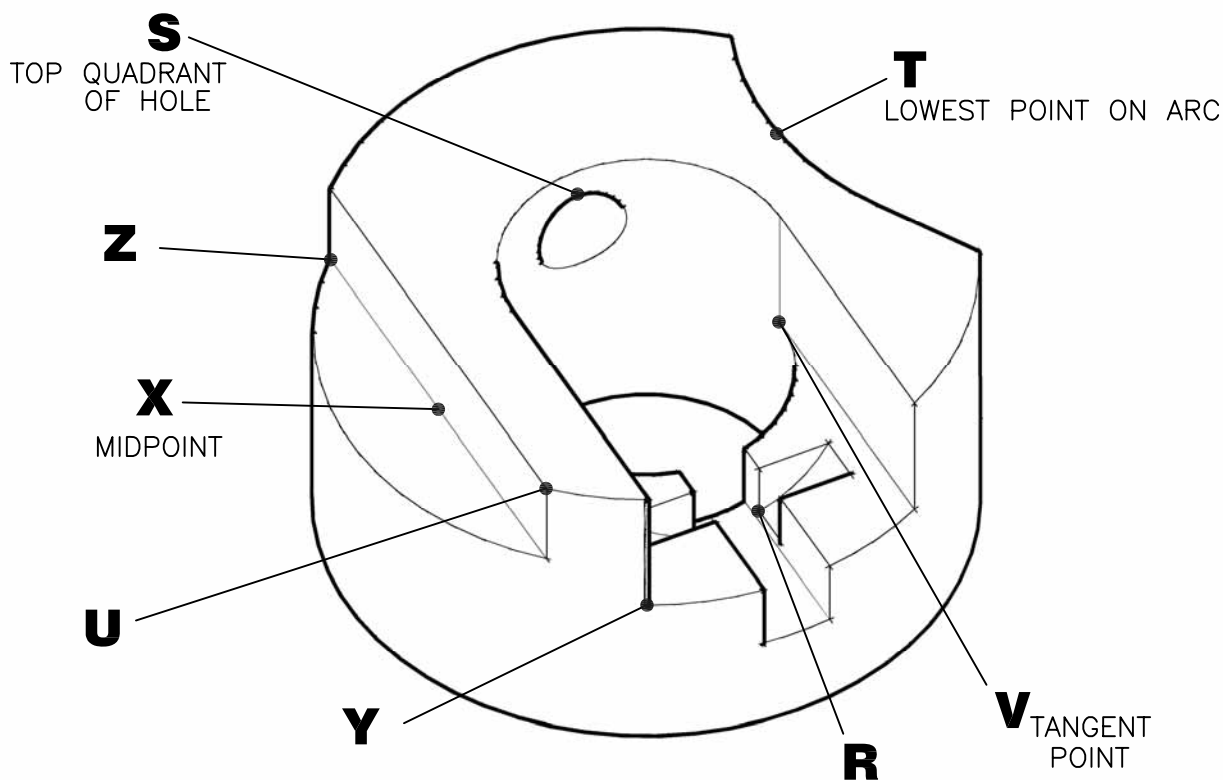
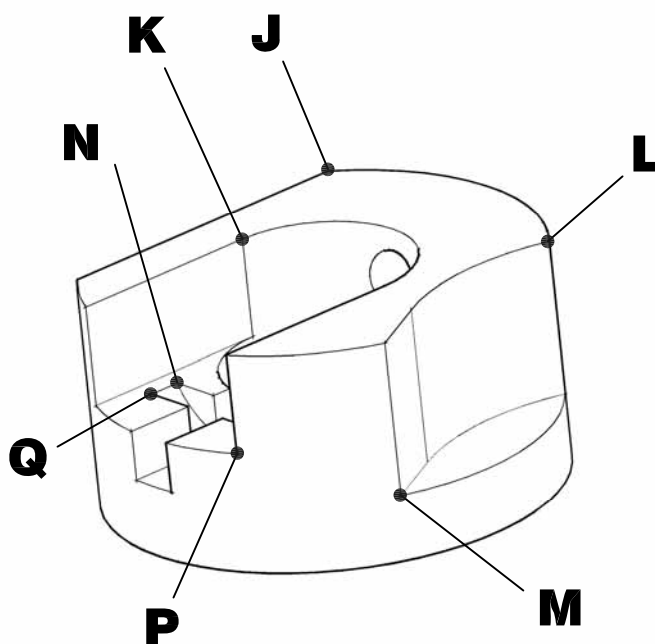
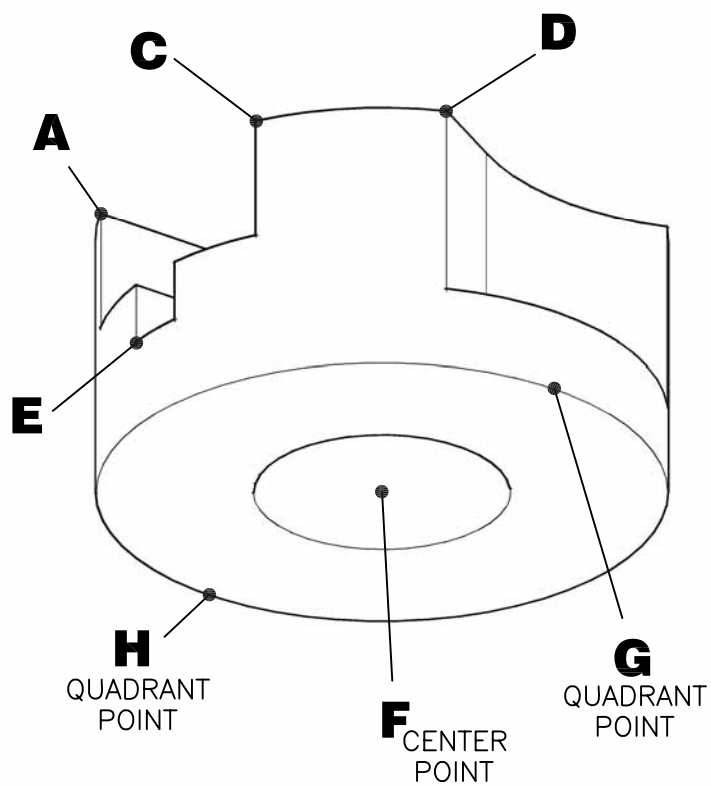
DATE: MARCH, 2008

SCALE: NONE

REGISTRATION

NUMBER:

ILLINOIS DRAFTING EDUCATORS ASSOCIATION REGIONAL DRAFTING COMPETITION



INTRODUCTORY CONTEST CHECKING GUIDE

DATE: MARCH, 2008

SCALE: NONE

REGISTRATION

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FOR THE FOLLOWING DISTANCE CHECKS, YOU WILL NOT BE CHECKING THE TRUE 3D DISTANCE BETWEEN POINTS, BUT ONLY THE 2D DISTANCE BETWEEN POINTS IN A PARTICULAR VIEW. THIS REQUIRES YOU TO VISUALIZE THE LOCATION OF THE SPECIFIED CORNERS IN A PARTICULAR VIEW.

FOR EACH ITEM, USE THE CHECK GUIDE SHEET, YOUR CAD SYSTEM (SET TO 3-PLACE DECIMAL PRECISION), AND YOUR CAD DRAWING TO DETERMINE A DISTANCE BETWEEN SPECIFIED POINTS. PLACE THE VALUE FOR EACH DISTANCE CHECK IN THE BLANK AS A NUMBER WITH THREE PLACE DECIMAL PRECISION. (i.e. 4.378)

**PLEASE PLACE YOUR CONTESTANT
NUMBER IN THE TITLE BLOCK**

PLACE ANSWER HERE



FRONT VIEW DISTANCE CHECKS

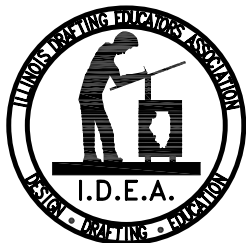
- | | |
|------------|-------------------|
| 1. D TO E | MY DISTANCE _____ |
| 2. A TO S | MY DISTANCE _____ |
| 3. H TO C | MY DISTANCE _____ |
| 4. F TO U | MY DISTANCE _____ |
| 5. X TO M | MY DISTANCE _____ |
| 6. L TO R | MY DISTANCE _____ |
| 7. K TO V | MY DISTANCE _____ |
| 8. Z TO Q | MY DISTANCE _____ |
| 9. N TO J | MY DISTANCE _____ |
| 10. T TO G | MY DISTANCE _____ |

RIGHT SIDE VIEW DISTANCE CHECKS

- | | |
|------------|-------------------|
| 11. T TO Y | MY DISTANCE _____ |
| 12. D TO E | MY DISTANCE _____ |
| 13. R TO L | MY DISTANCE _____ |
| 14. F TO J | MY DISTANCE _____ |
| 15. M TO S | MY DISTANCE _____ |

TOP VIEW DISTANCE CHECKS

- | | |
|------------|-------------------|
| 16. X TO R | MY DISTANCE _____ |
| 17. S TO H | MY DISTANCE _____ |
| 18. A TO Z | MY DISTANCE _____ |
| 19. L TO N | MY DISTANCE _____ |
| 20. K TO E | MY DISTANCE _____ |



INTRODUCTORY CAD ANSWER SHEET

DATE: MARCH, 2008

REGISTRATION

SCALE: NONE

NUMBER: _____

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